

REMARKS

We have cancelled claims 20-29 and 37-41 without prejudice and will consider pursuing these claims in a divisional application.

Prior Art Rejections

Independent claims 1 and 30

The Examiner rejected independent claim 1 as anticipated by either Beerman or Boer. In paragraph 16 of the office action (Response to Arguments), the Examiner argued that Beerman discloses “a cylindrical hollow member made of non-magnetic steel, which is inherently thermally conductive.” But, independent claims 1 and 30 require more than that. We submit that Beerman does not disclose a stator coil support structure constructed of thermally-conductive material including an axial passage for receiving a rotor assembly as required by independent claim 1. As can be seen most clearly in Figs. 1, 2, 4, and 6, the structure in Beerman’s device having the axial passage for receiving the rotor 6 is inner hollow cylinder 4, which Beerman explicitly states is formed of a “synthetic” material. Synthetic materials are clearly not inherently thermally-conductive, as required by independent claim 1. For example, synthetic materials such as Teflon or fiberglass or generally considered to be thermally non-conductive.

In paragraph 16 of the office action (Response to Arguments), the Examiner, with reference to independent claim 30, argues that applicants’ arguments were not persuasive because Boer discloses the use of non-magnetic sheet metal which is inherently thermally conductive. But, the structure to which the Examiner refers to as being non-magnetic sheet metal are Boer’s slot teeth 2. Referring to Boer’s Fig. 1, slot teeth 2 is not the structure that constitutes stator coil support structure. Moreover, if the Examiner construes Boer’s slot teeth as stator coil support structure, the slot teeth does not include an axial passage for receiving a rotor assembly and channels to receive stator coil assemblies, as required by independent claims 1 and 30.

Boer's stator coil structure is clearly stator lamination packet SB which is composed of individual lamination segments 1.0 of which comprise magnetic material (see Col.6, lines 37-41). We maintain therefore that Boer does not disclose a stator coil support structure constructed of non-magnetic ... material, as required by independent claims 1 and 30.

For the reasons stated above, we submit that independent claims 1 and 30 are patentably distinct over both Beerman and Boer.

The Examiner also rejected dependent claims 2-8 and 31-36 as unpatentable over one of Beerman and Boer in view of one or more of Albright, Denk, Laskaris, and Mariner. However, none of these secondary or tertiary references disclose the features discussed above that were found to be missing in independent claims 1 and 30. We submit, therefore that these dependent claims are patentable for at least the same reasons that independent claims 1 and 30 are patentable.

Independent claim 9

The Examiner rejected independent claim 9 as unpatentable over Boer in view of Cooper. The Examiner acknowledges that Boer does not disclose a superconducting rotor but argues that Cooper discloses a refrigerated superconducting rotor. We submit however that neither Boer nor Cooper disclose a stator coil support structure constructed of thermally-conductive material including an axial passage for receiving a rotor assembly as required by independent claim 9. As stated above, Boer's stator coil structure is clearly stator lamination packet SB which is composed of individual lamination segments 1.0 of which comprise magnetic material. We maintain therefore that Boer does not disclose a stator coil support structure constructed of non-magnetic ... material, as required by independent claim 9.

For the reasons stated above, we submit that independent claim 9 is patentably distinct over Boer in view of Cooper.

The Examiner also rejected dependent claims 10-19 as unpatentable over Boer in view of Cooper and further in view of one or more of Albright, Denk, Laskaris, Mariner. However, none of these tertiary or quaternary references disclose the features discussed above that were found to

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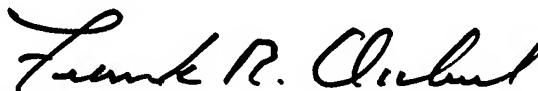
be missing in independent claim 9. We submit, therefore that these dependent claims are patentable for at least the same reasons that independent claim 9 is patentable.

Enclosed is a \$950.00 check for the Petition for Extension of Time fee and a \$330.00 check for the Notice of Appeal fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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